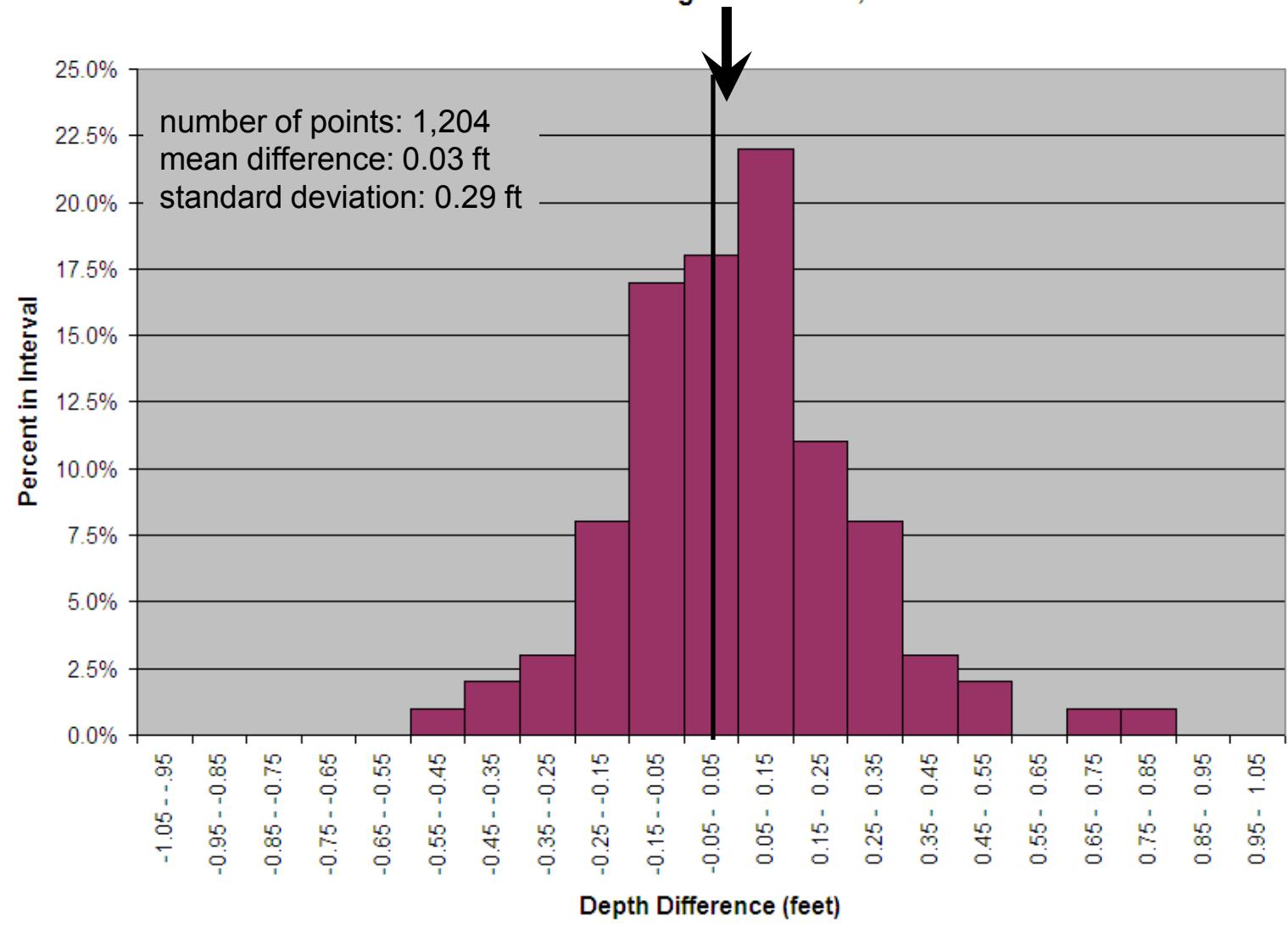
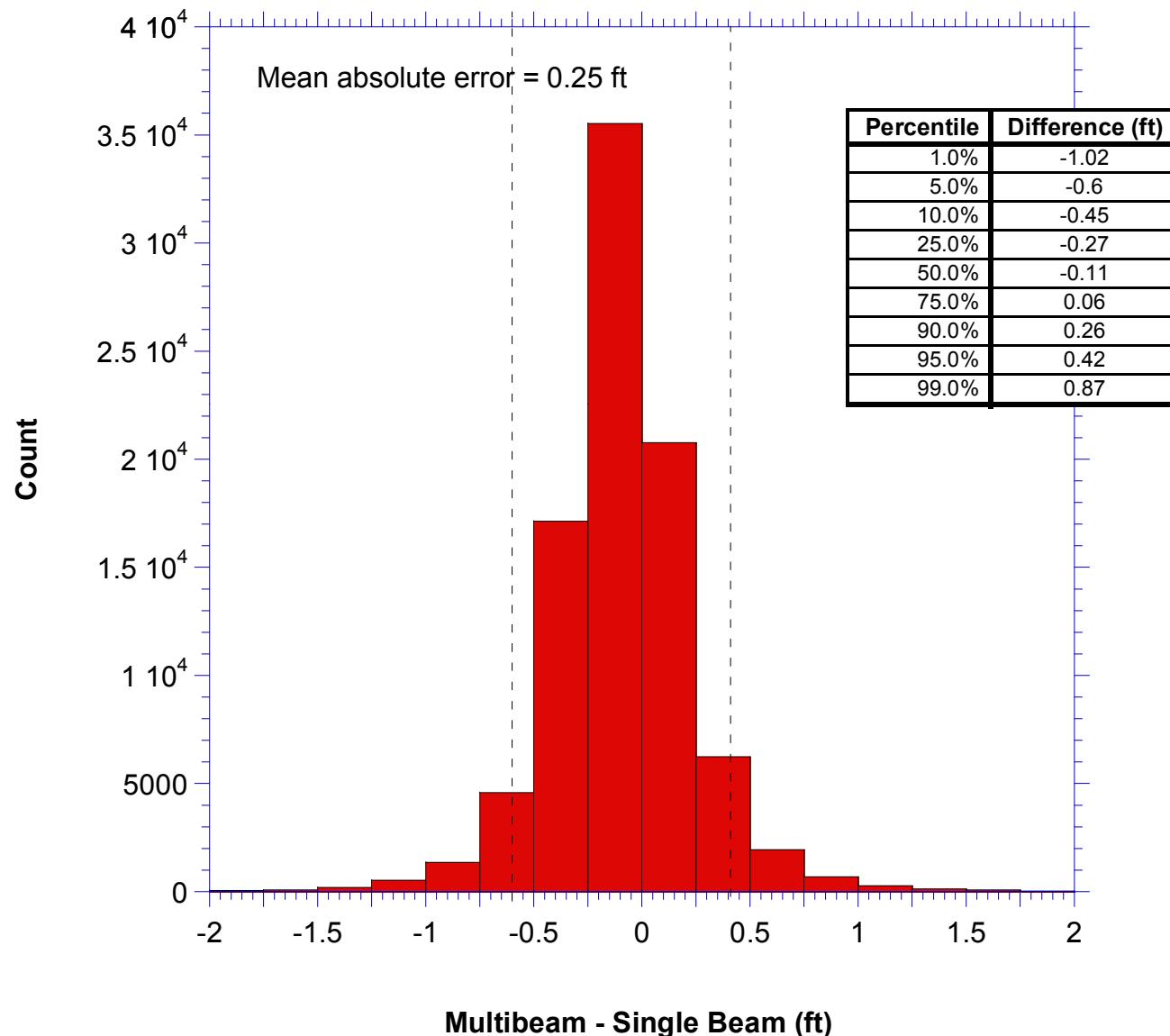


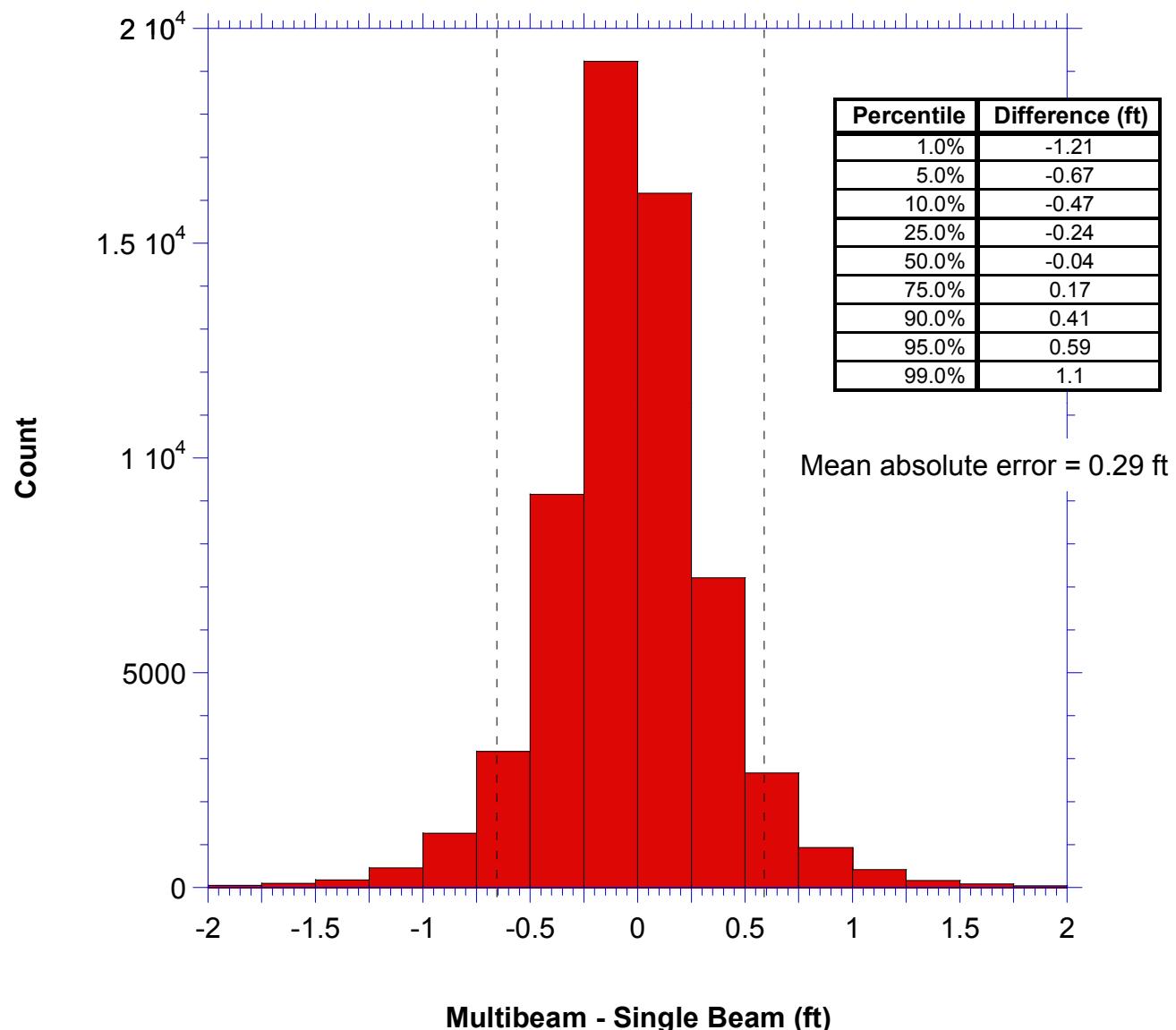
**Figure 1a: Single-Beam Depth Difference at Crossings
Transverse Lines - Along-River Lines, 2007**

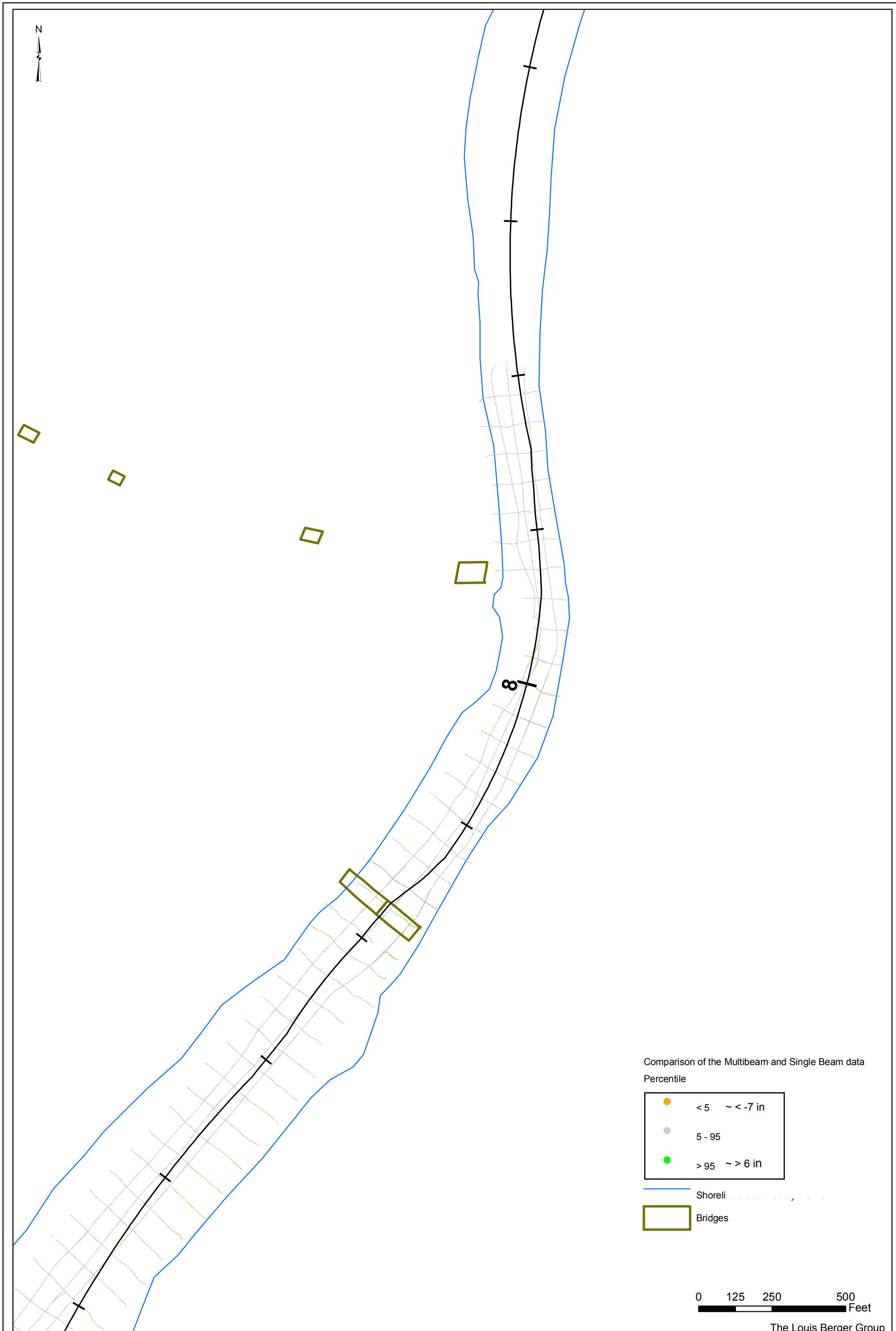


:]ifY%W Histogram of 2007 Multibeam - 2007 Single Beam Cross Transects



:]% Histogram of 2007 Multibeam - 2007 Single Beam Longitudinal Transects





Comparison of the MultiBeam and Single Beam Surveys

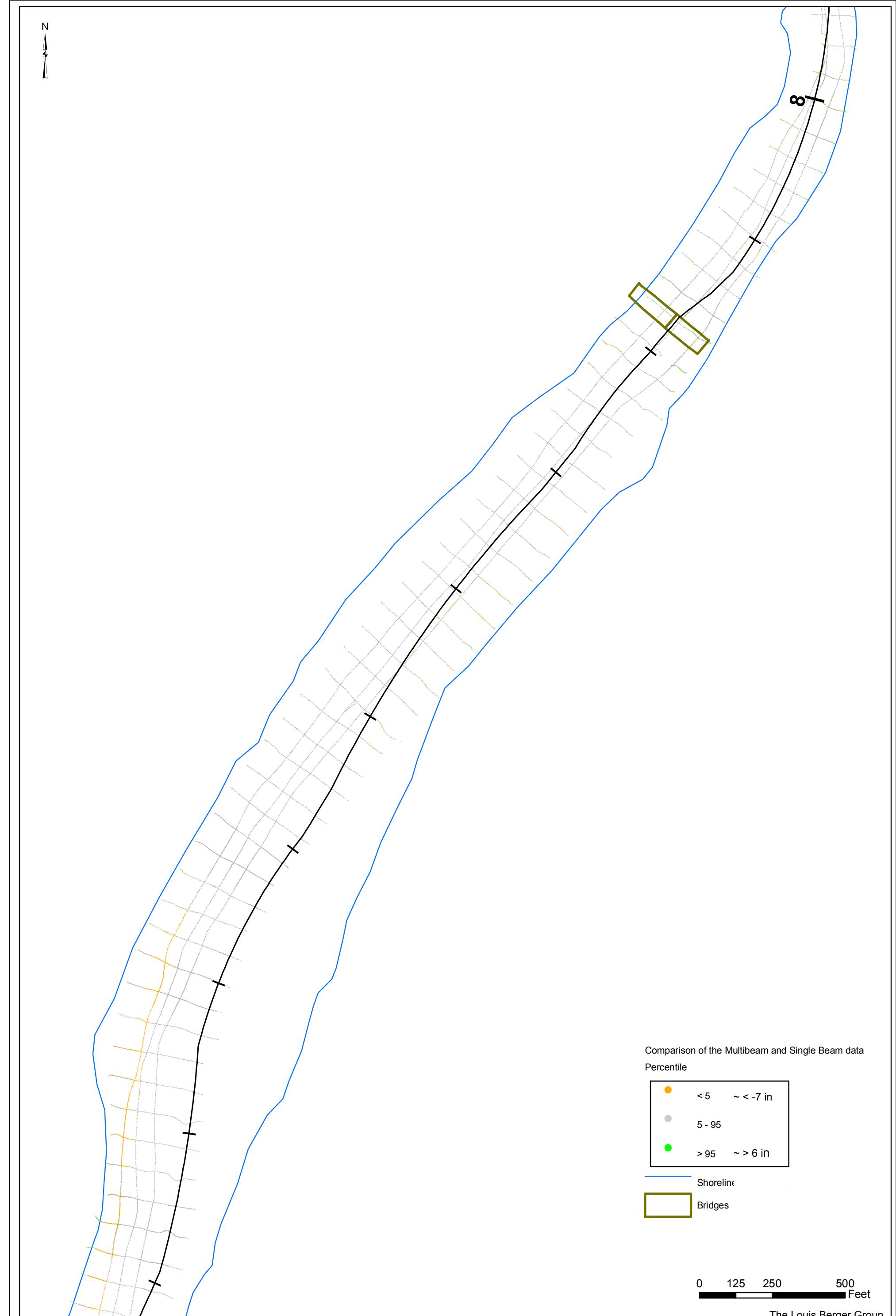
Lower Passaic River Restoration

Figure 2a

November 2009



N

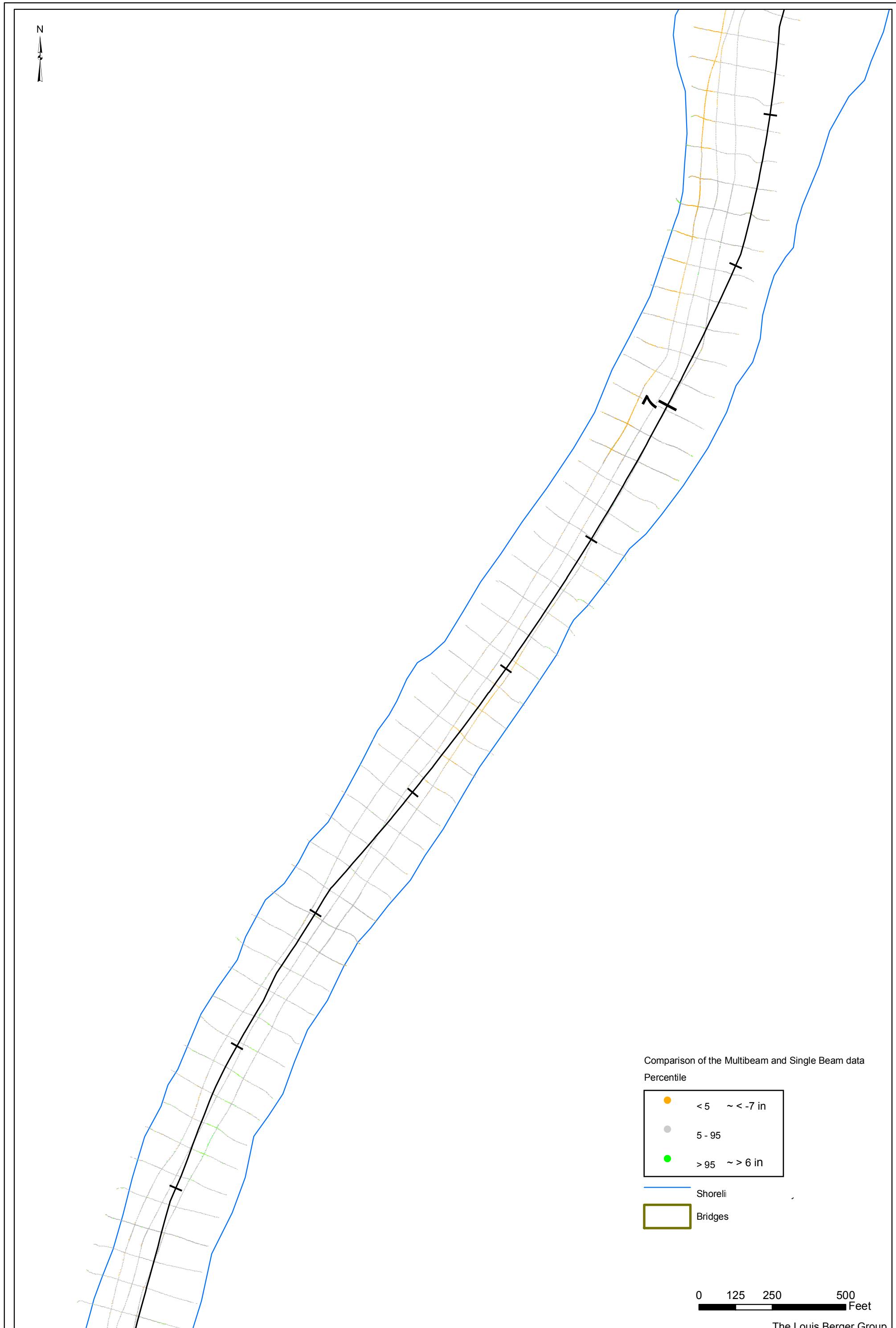


Comparison of the MultiBeam and Single Beam Surveys

Lower Passaic River Restoration

Figure 2b

November 2009



Comparison of the MultiBeam and Single Beam Surveys

Lower Passaic River Restoration

Figure 2c

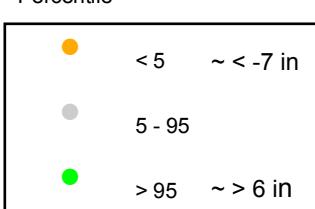
November 2009



N

Comparison of the Multibeam and Single Beam data

Percentile



Shorelin



0 125 250 500 Feet

The Louis Berger Group



Comparison of the MultiBeam and Single Beam Surveys

Lower Passaic River Restoration

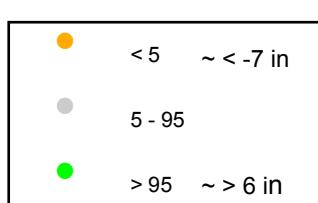
Figure 2d

November 2009

N

Comparison of the Multibeam and Single Beam data

Percentile



Shoreline

Bridges

0 125 250 500 Feet

The Louis Berger Group



Comparison of the MultiBeam and Single Beam Surveys

Lower Passaic River Restoration

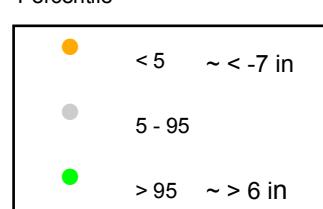
Figure 2e

November 2009

N

Comparison of the Multibeam and Single Beam data

Percentile



Shoreline

Bridges

0 125 250 500 Feet

The Louis Berger Group

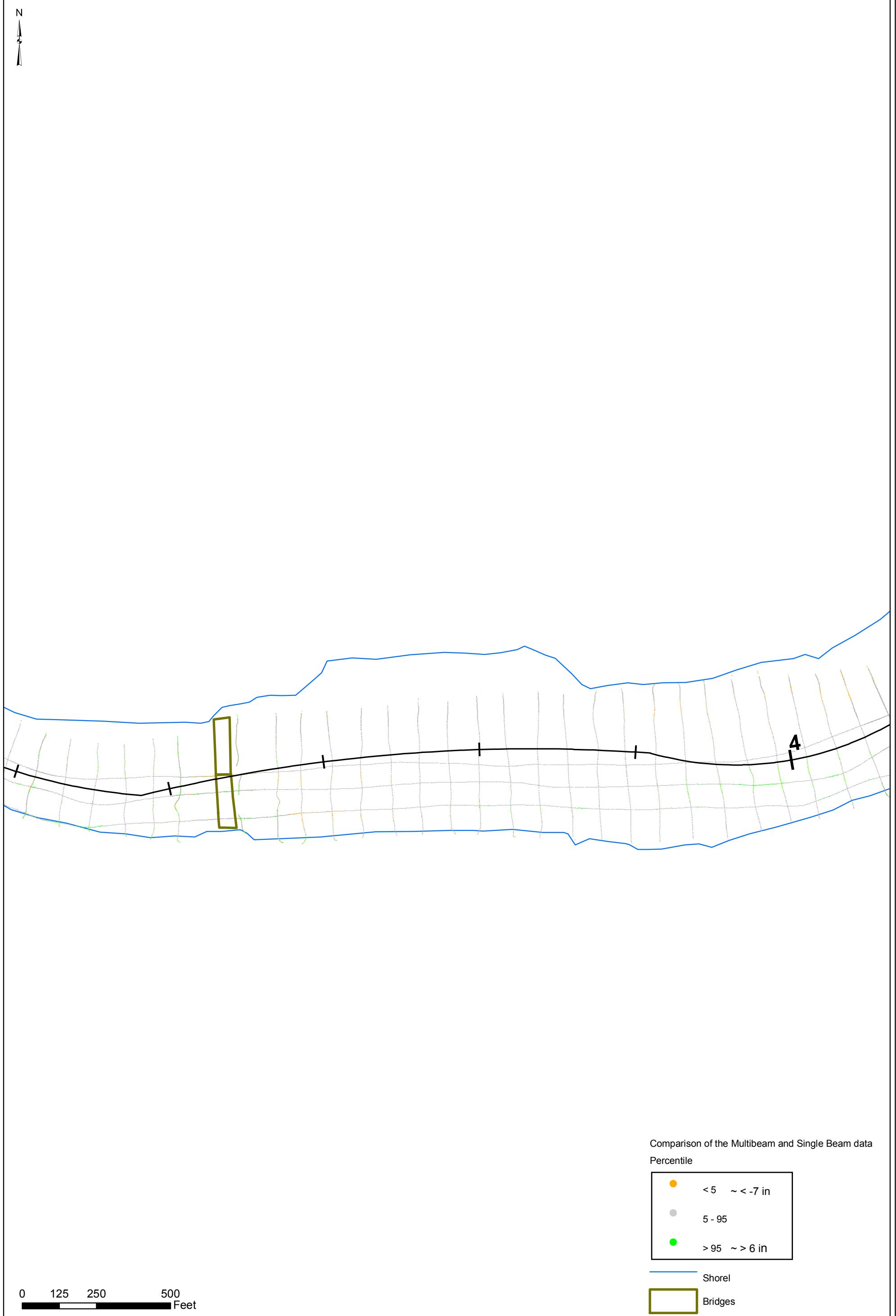
Comparison of the MultiBeam and Single Beam Surveys

Lower Passaic River Restoration

Figure 2f

November 2009



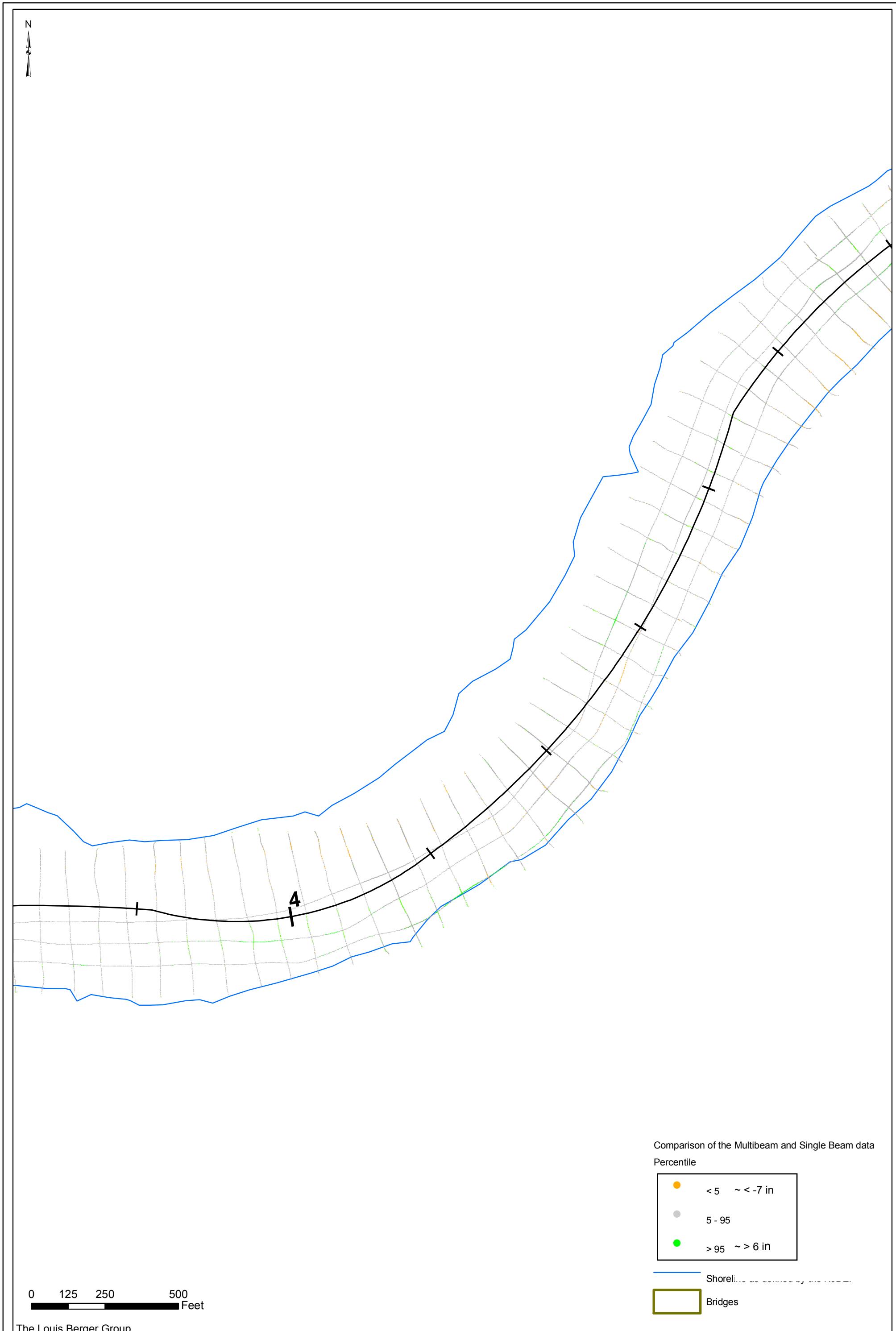


Comparison of the MultiBeam and Single Beam Surveys

Lower Passaic River Restoration

Figure 2g

November 2009



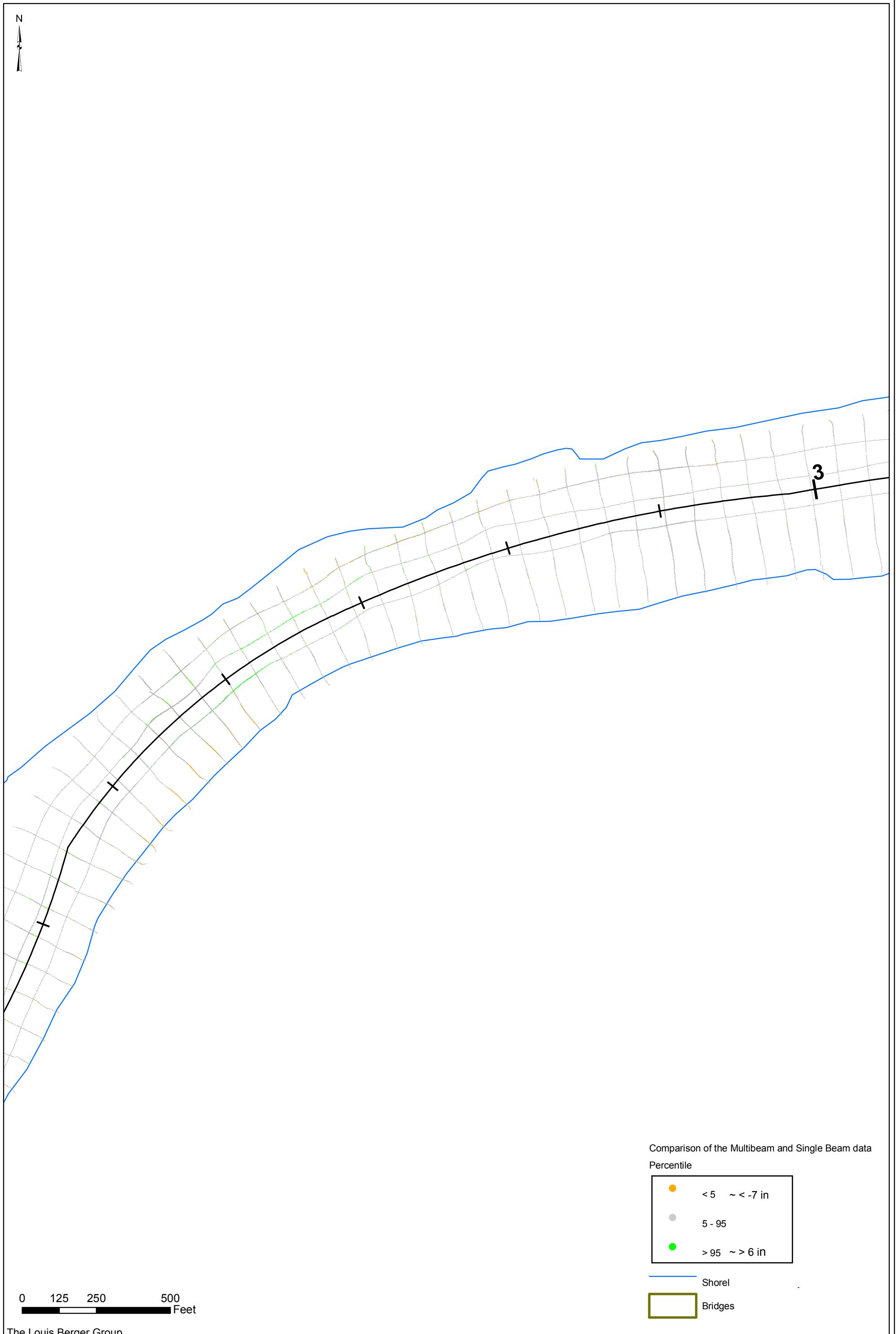
Comparison of the MultiBeam and Single Beam Surveys

Lower Passaic River Restoration

Figure 2h

November 2009





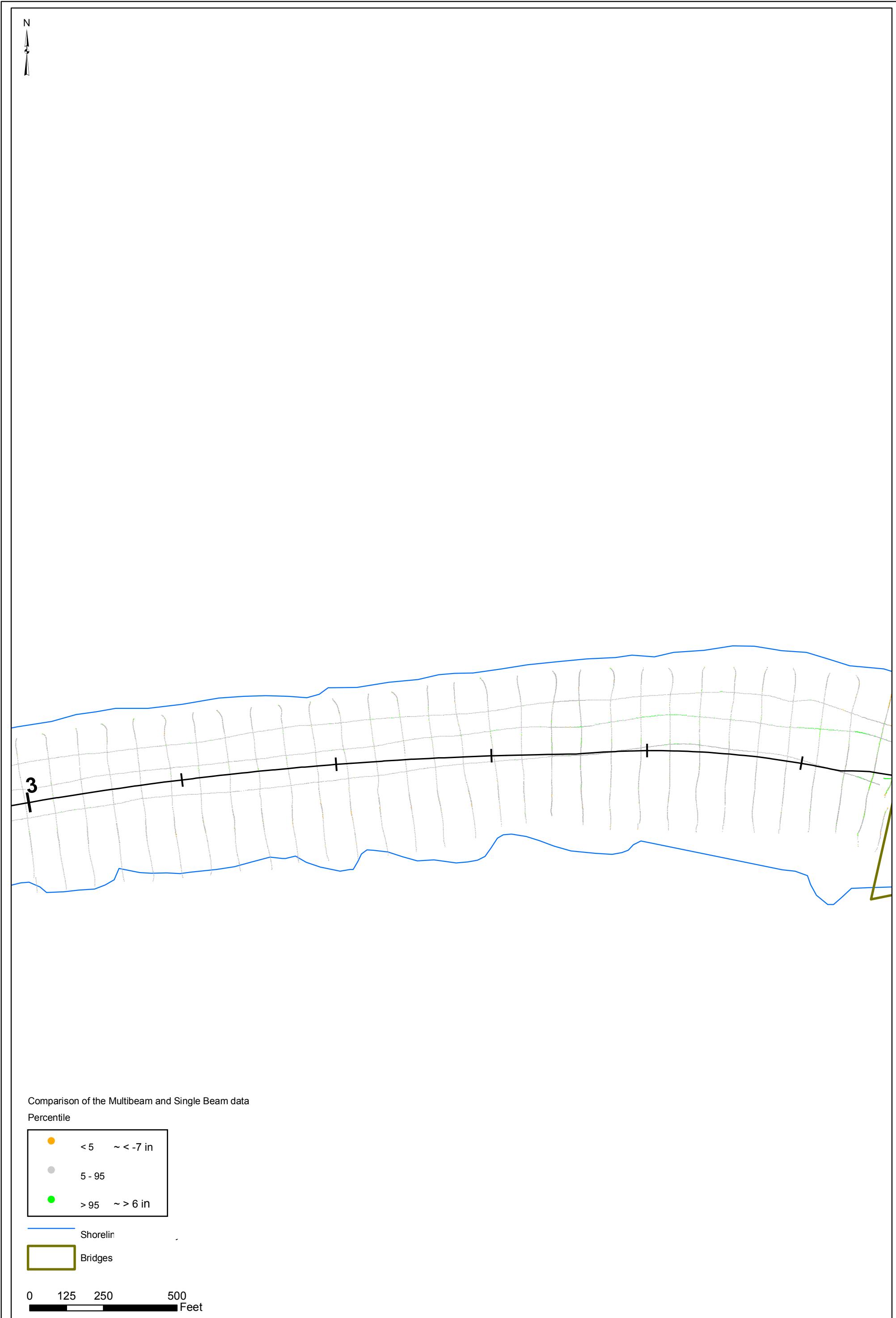
Comparison of the MultiBeam and Single Beam Surveys

Lower Passaic River Restoration

Figure 2i

November 2009



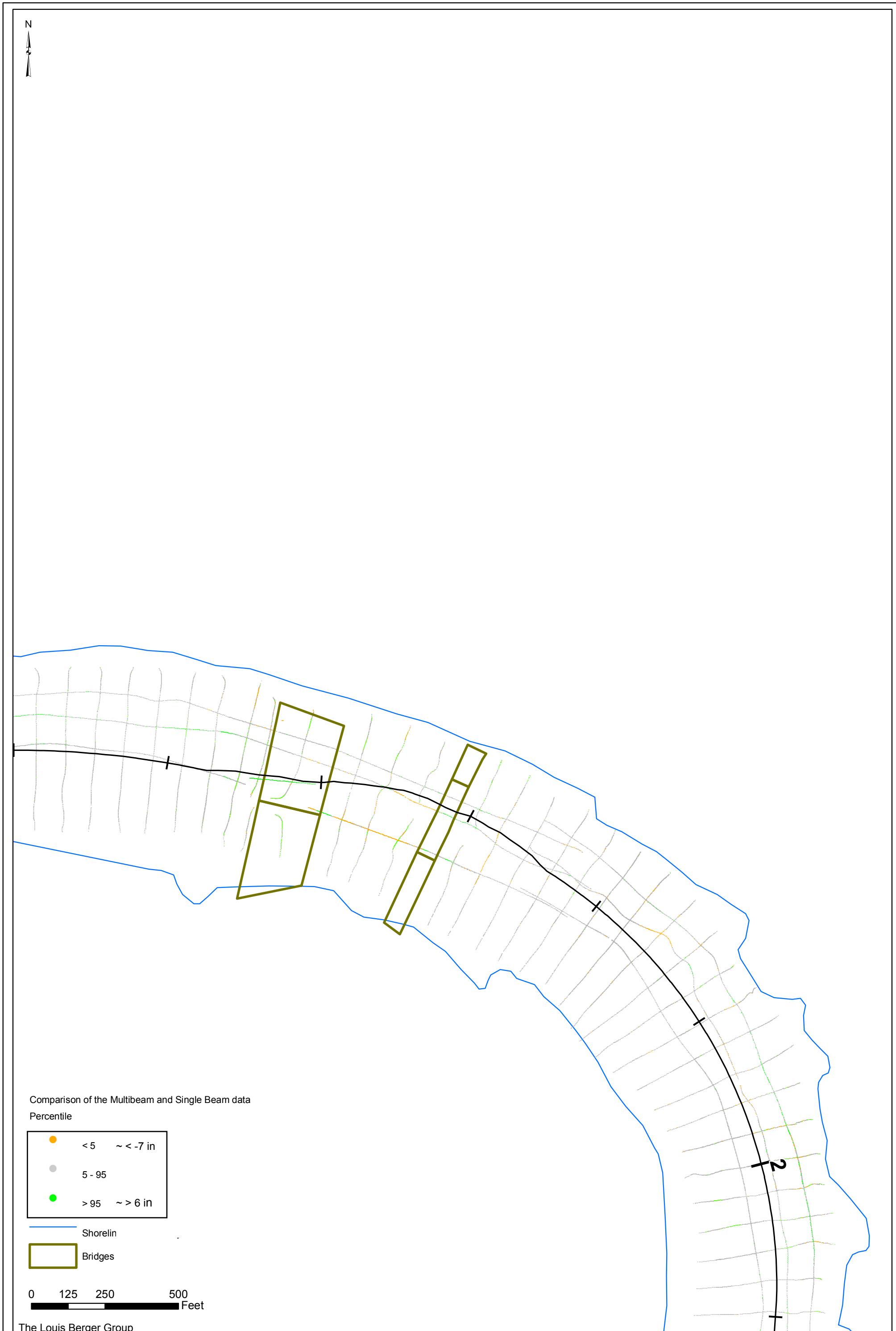


Comparison of the MultiBeam and Single Beam Surveys

Lower Passaic River Restoration

Figure 2j

November 2009



Comparison of the MultiBeam and Single Beam Surveys

Lower Passaic River Restoration

Figure 2k

November 2009





Comparison of the MultiBeam and Single Beam Surveys

Lower Passaic River Restoration

Figure 21

November 2009



N

Comparison of the Multibeam and Single Beam data
Percentile

- < 5 ~ < -7 in
- 5 - 95
- > 95 ~ > 6 in

Shoreline

Bridges

0 125 250 500 Feet

The Louis Berger Group

Comparison of the MultiBeam and Single Beam Surveys

Lower Passaic River Restoration

Figure 2m

November 2009

**Figure 3a: Conditional Simulation Validation
Difference between 2007 Actual Multibeam Surface and
Predicted 2007 Surface (1995 Single Beam Locations)**

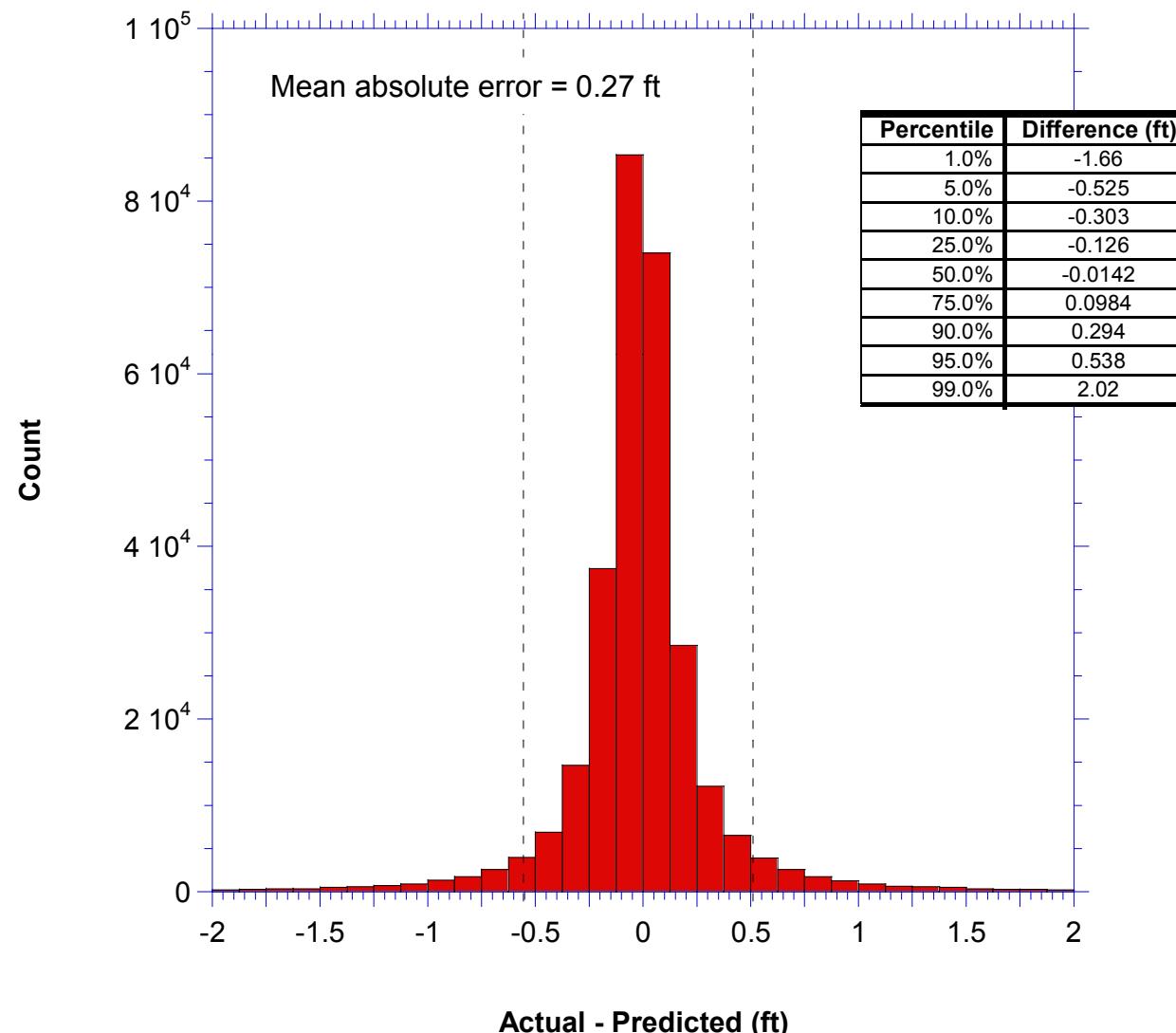


Figure 3b: Passaic Bathymetric Change Observations

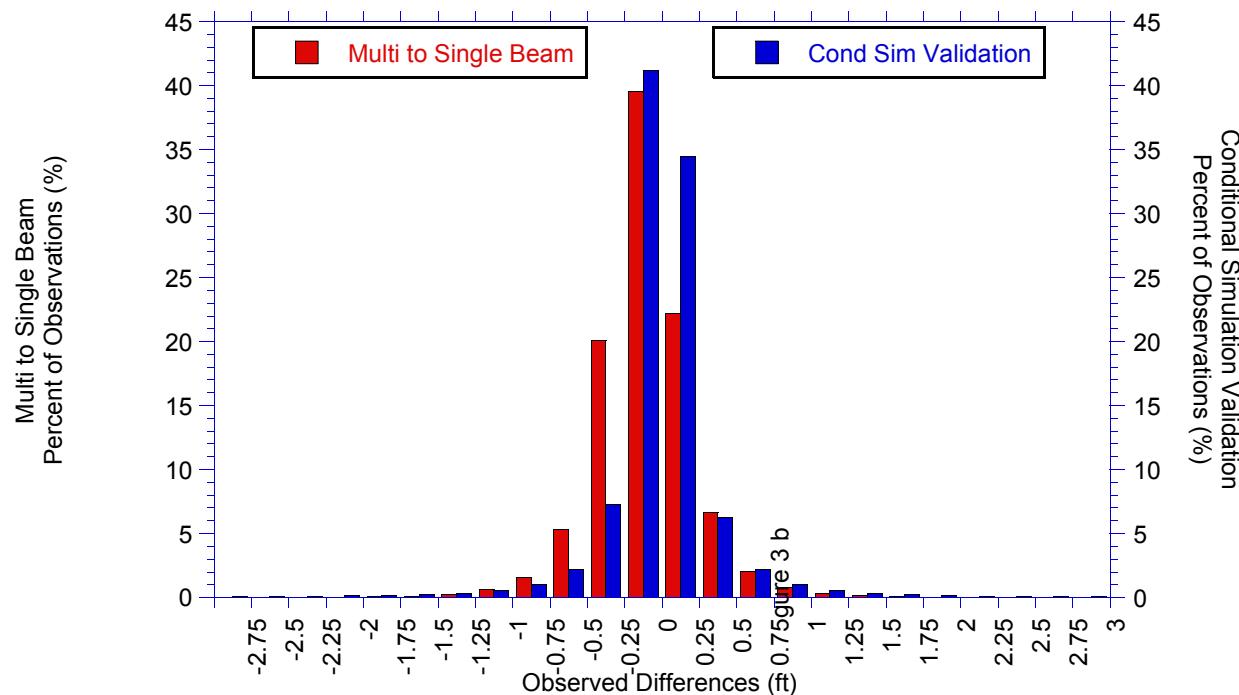


Figure 4: Conditional Simulation Validation False Positive rates

2007 Multibeam Surface Approximated by the 1995 Locations
via Conditional Simulation

Threshold	P(Erode>12-in)	P(Erode>6 in)	P(Erode>3 in)	P(Erode>0 in)
>31% probability	5%			
>50% probability	2.09%	5.23%	12%	49.7%
>62.5% Probability			5%	
>70% probability	1.178%	2.156%	3.367%	6.556%
>74% probability				5%